

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/573,885A  
Source: IEW  
Date Processed by STIC: 7/20/07

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 04/20/2007

PATENT APPLICATION: US/10/573,885A

TIME: 16:01:24

Input Set : E:\seqSU0411PCT.txt

Output Set: N:\CRF4\04202007\J573885A.raw

```

3 <110> APPLICANT: SUNTORY LIMITED
5 <120> TITLE OF INVENTION: A gene encoding an enzyme catalyzing biosynthesis of lignan,
6   and the use thereof
8 <130> FILE REFERENCE: SU0411/PCT
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/573,885A
C--> 10 <141> CURRENT FILING DATE: 2006-03-29
10 <150> PRIOR APPLICATION NUMBER: JP 2003-341313
11 <151> PRIOR FILING DATE: 2003-09-30
13 <150> PRIOR APPLICATION NUMBER: JP 2003-432383
14 <151> PRIOR FILING DATE: 2003-12-26
16 <160> NUMBER OF SEQ ID NOS: 79
18 <170> SOFTWARE: PatentIn Ver. 2.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 506
22 <212> TYPE: PRT
23 <213> ORGANISM: Sesamum indicum
25 <220> FEATURE:
26 <223> OTHER INFORMATION: SiP189
28 <400> SEQUENCE: 1
29 Met Glu Ala Glu Met Leu Tyr Ser Ala Leu Ala Leu Thr Phe Ala Ile
30   1             5             10             15
32 Phe Met Val Tyr Arg Ile Leu Ser Asn Ser Gln Asp Lys Arg Ser Leu
33   20             25             30
35 Thr Lys Leu Pro Pro Ser Pro Pro Gly Trp Leu Pro Val Ile Gly His
36   35             40             45
38 Ala His Leu Met Lys Asn Leu Leu His Arg Thr Leu Tyr Asp Phe Ser
39   50             55             60
41 Gln Lys Leu Gly Pro Ile Phe Ser Ile Arg Phe Gly Ser Arg Leu Val
42  65             70             75             80
44 Val Val Val Ser Ser Ser Leu Val Glu Glu Cys Phe Thr Lys Tyr
45   85             90             95
47 Asp Ile Val Leu Ala Asn Arg Pro Gln Ala Ser Val Asp Arg Arg Ser
48   100            105            110
50 Leu Gly Phe Ser Thr Thr Ser Val Ile Gly Ala Pro Tyr Gly Asp His
51   115            120            125
53 Trp Arg Asn Leu Arg Lys Leu Cys Asp Leu Glu Val Phe Ala Pro Thr
54   130            135            140
56 Arg Leu Ala Ser Phe Leu Ser Ile Arg Leu Asp Glu Arg Asp Arg Met
57  145            150            155            160
59 Ile Ser Ala Leu Tyr Lys Ile Ser Ser Ala Gly Phe Ala Lys Val Asn
60   165            170            175
62 Leu Glu Ala Lys Ile Val Glu Leu Thr Phe Asn Asn Ile Met Arg Met
63   180            185            190

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65 Val Ala Ala Lys Arg Tyr Tyr Gly Glu Glu Ala Glu Asp Asp Glu Glu
66      195      200      205
68 Ala Lys Arg Phe Arg Asp Leu Thr Lys Glu Ala Leu Glu Leu Thr Ser
69      210      215      220
71 Ala Ser Asn Pro Gly Glu Ile Phe Pro Ile Leu Arg Trp Leu Gly Cys
72 225      230      235      240
74 Asn Gly Leu Glu Lys Lys Leu Ala Val His Ser Arg Lys Thr Asp Glu
75      245      250      255
77 Phe Met Gln Gly Leu Leu Asp Glu His Arg Arg Gly Glu Arg Gln Asn
78      260      265      270
80 Thr Met Val Asp His Leu Leu Ser Leu Gln Glu Ser Gln Pro Glu Tyr
81      275      280      285
83 Tyr Thr Asp Glu Ile Ile Thr Gly Leu Ile Val Ala Leu Ile Ile Ala
84      290      295      300
86 Gly Thr Asp Ala Ser Val Val Thr Thr Glu Trp Ala Met Ser Leu Leu
87 305      310      315      320
89 Leu Asn His Pro Lys Val Leu Glu Lys Ala Arg Lys Glu Leu Asp Thr
90      325      330      335
92 Leu Val Gly His Glu Arg Met Val Asp Glu His Asp Leu Pro Lys Leu
93      340      345      350
95 Arg Tyr Leu His Cys Ile Val Leu Glu Thr Leu Arg Leu Phe Pro Ser
96      355      360      365
98 Val Pro Thr Leu Val Pro His Glu Pro Ser Glu Asp Cys Lys Ile Gly
99      370      375      380
101 Gly Tyr Asn Val Pro Lys Gly Thr Met Val Leu Val Asn Ala Trp Ala
102 385      390      395      400
104 Ile His Arg Asp Pro Lys Val Trp Asp Asp Pro Leu Ser Phe Lys Pro
105      405      410      415
107 Asp Arg Phe Glu Ile Met Glu Val Glu Thr His Lys Leu Leu Pro Phe
108      420      425      430
110 Gly Met Gly Arg Arg Ala Cys Pro Gly Ala Gly Leu Ala Gln Lys Phe
111      435      440      445
113 Val Gly Leu Ala Leu Gly Ser Leu Ile Gln Cys Phe Asp Trp Glu Arg
114      450      455      460
116 Thr Ser Pro Glu Lys Ile Asp Leu Asn Glu Gly Ser Gly Ile Thr Leu
117 465      470      475      480
119 Pro Lys Ala Lys Thr Leu Glu Ala Met Cys Lys Pro Arg His Val Met
120      485      490      495
122 Glu Lys Val Leu Arg Gln Val Ser Asn Val
123      500      505
126 <210> SEQ ID NO: 2
127 <211> LENGTH: 1518
128 <212> TYPE: DNA
129 <213> ORGANISM: Sesamum indicum
131 <220> FEATURE:
132 <223> OTHER INFORMATION: SiP189
134 <400> SEQUENCE: 2
135 atggaagctg aaatgctata ttcagctctc gctctcacct tcgccatatt catggtttac 60
136 agaattcttt ctaattcgca ggacaagcgc agcctgacta agctgcctcc gagccccgcc 120

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137 gggttggtgc cggtgatcgg ccacgctcat ctcatgaaaa atctcctcca tagaacacta 180
138 tacgacttct cccagaaact gggacccata ttttccatcc gggtcgggtc gcgcctcgtg 240
139 gtggtggtgt cctcctcctc cctggtggag gaatgtttca ccaagtatga cattgtcctg 300
140 gcaaatacgcc ctcaggcttc tgttgaccgg cgtcacttg gggtcagcac caccagcgta 360
141 atcggggccc cgtacgggga ccattggcgc aacctgcgaa agttgtgcga tcttgaagta 420
142 ttcgccccga cccgtctcgc ctcgttttta tccatcaggc ttgacgagag ggaccgcatg 480
143 atttccgcgt tatacaaaat ctcgtccgcc gggttcgcga aggtgaattt ggaagcgaag 540
144 attgtggagc tgacgtttaa taacataatg aggatgggtg cggcgaagag atactatggg 600
145 gaggaggcgg aggacgacga ggaggcgaag aggttcaggg acctgacgaa ggaggctttg 660
146 gagttgacga gcgcttccaa tcctggtgag atatttccaa tattgcggtg gcttggttgc 720
147 aatgggctgg agaagaagct ggctgttcac tcgcggaaga cggatgagtt catgcaaggg 780
148 ctgctggacg aacaccgacg gggcgagcgc cagaacacca tggttgatca tttgctttcg 840
149 ttgcaggaat ctcaacctga gtactacact gatgaaatca tcaactggcct catagtgtgca 900
150 ttgataattg cgggaacgga tgcacggtt gtaactacag aatgggcatg gtccctttta 960
151 ctaaatacatc ccaaagtact tgaaaaggct agaaaagaac tggacactct agtaggacac 1020
152 gaacgcattg ttgatgaaca cgatctcccc aaactacgtt accttcaactg catagtcttg 1080
153 gagaccttaa gggtattccc ttctgttcca actttggtgc cacacgaacc atcagaggat 1140
154 tgtaaaattg ggggatacaa tgtccccaag gggacaatgg tattagtga tgcttgaggca 1200
155 atacaccgag accccaaggt gtgggacgac cccttgagct ttaagcccga caggtttgag 1260
156 ataataaggag tggagacaca caagttgttg ccgttcggaa tgggcaggag agcgtgtcct 1320
157 ggagctggac tggcgagaaa gtttgtgggg ttggctttgg ggtcgctgat tcagtgtttc 1380
158 gactgggaga gaacgagtcg cgagaaaatt gacttgaacg aaggttcttg gataaccttg 1440
159 cctaaagcta agacgttgga agccatgtgc aaacctagac atgtcatgga aaaagttctt 1500
160 cgtcaggttt ccaacggt 1518
163 <210> SEQ ID NO: 3
164 <211> LENGTH: 21
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
170 Synthesized Primer Sequence, Sil8SrRNA-FW
172 <400> SEQUENCE: 3
173 tatgcttgtc tcaaagatta a 21
176 <210> SEQ ID NO: 4
177 <211> LENGTH: 21
178 <212> TYPE: DNA
179 <213> ORGANISM: Artificial Sequence
181 <220> FEATURE:
182 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
183 Synthesized Primer Sequence, Sil8SrRNA-RV
185 <400> SEQUENCE: 4
186 aacatctaag ggcacacag a 21
189 <210> SEQ ID NO: 5
190 <211> LENGTH: 24
191 <212> TYPE: DNA
192 <213> ORGANISM: Artificial Sequence
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
196 Synthesized Primer Sequence, CYP90A-FW

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TIME: 16:01:24

Input Set : E:\seqSU0411PCT.txt

Output Set: N:\CRF4\04202007\J573885A.raw

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198 <400> SEQUENCE: 5
199 ttttccgatg aagagattgt tgac 24
202 <210> SEQ ID NO: 6
203 <211> LENGTH: 18
204 <212> TYPE: DNA
205 <213> ORGANISM: Artificial Sequence
207 <220> FEATURE:
208 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
209 Synthesized Primer Sequence, CYP90A-RV
211 <400> SEQUENCE: 6
212 tgccatctcc aagggttg 18
215 <210> SEQ ID NO: 7
216 <211> LENGTH: 24
217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial Sequence
220 <220> FEATURE:
221 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
222 Synthesized Primer Sequence, CYP72B-FW
224 <400> SEQUENCE: 7
225 cttaatgttc aaatgataat ggat 24
228 <210> SEQ ID NO: 8
229 <211> LENGTH: 18
230 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
233 <220> FEATURE:
234 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
235 Synthesized Primer Sequence, CYP72B-RV
237 <400> SEQUENCE: 8
238 gtaaactcgtt cagggttg 18
241 <210> SEQ ID NO: 9
242 <211> LENGTH: 24
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
248 Synthesized Primer Sequence, CYP71B-FW
250 <400> SEQUENCE: 9
251 ttcaccactg atcatctcaa agga 24
254 <210> SEQ ID NO: 10
255 <211> LENGTH: 18
256 <212> TYPE: DNA
257 <213> ORGANISM: Artificial Sequence
259 <220> FEATURE:
260 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
261 Synthesized Primer Sequence, CYP71B-RV
263 <400> SEQUENCE: 10
264 agaaacctgt cagggtta 18
267 <210> SEQ ID NO: 11
268 <211> LENGTH: 24

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## RAW SEQUENCE LISTING

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TIME: 16:01:24

Input Set : E:\seqSU0411PCT.txt

Output Set: N:\CRF4\04202007\J573885A.raw

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269 <212> TYPE: DNA
270 <213> ORGANISM: Artificial Sequence
272 <220> FEATURE:
273 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
274     Synthesized Primer Sequence, CYP84A-FW
276 <400> SEQUENCE: 11
277 cttaccctgtg acaatatcaa agca                                24
280 <210> SEQ ID NO: 12
281 <211> LENGTH: 18
282 <212> TYPE: DNA
283 <213> ORGANISM: Artificial Sequence
285 <220> FEATURE:
286 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
287     Synthesized Primer Sequence, CYP84A-RV
289 <400> SEQUENCE: 12
290 aaaaacctcg atggtcta                                18
293 <210> SEQ ID NO: 13
294 <211> LENGTH: 24
295 <212> TYPE: DNA
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
300     Synthesized Primer Sequence, CYP96A-FW
302 <400> SEQUENCE: 13
303 agtcatgata agttcctcag ggac                                24
306 <210> SEQ ID NO: 14
307 <211> LENGTH: 18
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
311 <220> FEATURE:
312 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
313     Synthesized Primer Sequence, CYP96A-RV
315 <400> SEQUENCE: 14
316 atccatctct ctggcttg                                18
319 <210> SEQ ID NO: 15
320 <211> LENGTH: 24
321 <212> TYPE: DNA
322 <213> ORGANISM: Artificial Sequence
324 <220> FEATURE:
325 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
326     Synthesized Primer Sequence, CYP710A-FW
328 <400> SEQUENCE: 15
329 tccgaagacg aagccatcgg cggc                                24
332 <210> SEQ ID NO: 16
333 <211> LENGTH: 18
334 <212> TYPE: DNA
335 <213> ORGANISM: Artificial Sequence
337 <220> FEATURE:
338 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially

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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 04/20/2007  
PATENT APPLICATION: US/10/573,885A      TIME: 16:01:25

Input Set : E:\seqSU0411PCT.txt  
Output Set: N:\CRF4\04202007\J573885A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:77; N Pos. 2199

**VERIFICATION SUMMARY**

DATE: 04/20/2007

PATENT APPLICATION: US/10/573,885A

TIME: 16:01:25

Input Set : E:\seqSU0411PCT.txt

Output Set: N:\CRF4\04202007\J573885A.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:1814 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77 after pos.:2160